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SPECIAL BULLETIN

OFFICE OF TRAINING

No. 36-63 30 September 1963

TO: Agency Training Officers

Mathematics Seminar for Scientists and Engineers

To meet specific training needs expressed by various offices, OTR has arranged with The George Washington University to present a non-credit, non-competitive, mathematics refresher course. Tentatively entitled Mathematics Seminar for Scientists and Engineers, the course is designed for persons who have earned college credit in mathematics courses but who have lost proficiency through disuse of the skills once acquired.

The usual limitations of overt personnel status for an off-campus course at Headquarters Building will not apply. Because this non-credit course is being arranged under a special contract, GWU will not require registration data on individuals nor will the names of those attending be furnished to the University. By this special arrangement, personnel qualified for this course need not be denied attendance solely because of cover problems. Form 73 (Request for Internal Training) will be used for registration. They should be sent to the Registrar, OTR. The class will meet weekly from 1715 to 1945 on Tuesday, 8 October, in Room 6F-21. The instructor will be [redacted]. 25X1A

The course will consist of a review of the following topics, totaling 17 class sessions:

a. General (1 session). Exponents, roots, logarithms; number systems and codes (real, rational, and complex numbers); fractions and manipulative techniques.

b. Algebra (2 sessions). Equations and manipulative techniques including simultaneous equations, quadratic

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equations, and equations of higher order; series, sequences, and progressions.

c. Trigonometry (2 sessions). Trigonometric functions; Identities and manipulative techniques; spherical trigonometry.

d. Analytical Geometry (2 sessions). Coordinate systems; equations and graphs of lines, conic sections, and other curves.

e. Calculus (5 sessions). Concepts and definitions; derivatives and differentiation - applications such as velocities, accelerations, and maximum and minimum problems; integrals and integration - applications such as work, area, and volume; use of formulas and tables.

f. Matrices and vectors (5 sessions). Theory; manipulative techniques.

Mathematics Seminar for Scientists and Engineers is designed to prepare students to become currently qualified for enrollment in specific credit courses offered by local universities. A student might anticipate a schedule similar to the following:

a. Fall & Winter 1963 - Mathematics Seminar for Scientists and Engineers.

b. Spring 1964 - Calculus II and III (continuation of non-credit seminar outlined above).

c. Fall 1964 - Individual enrollment in GW University Mathematics 111; Mathematics for Engineers and Physicists or equivalent (3 hours credit).

d. Spring 1965 - GW University Mathematics 112; (continuation of Mathematics 111 -- 3 hours credit).